AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

- 1. (Original) A microporous polyolefin film which comprises 5 to 95 wt% of polyethylene (A) having a viscosity average molecular weight (Mv) of 2,000,000 or more, a first melting-peak signal height as determined by DSC (differential scanning calorimetry) of 3.0 mW/mg or more, a specific surface area of 0.7 m²/g or more, and an average particle size of 1 to 150 µm and 95 to 5 wt% of polyethylene (B) having an Mw of more than 10,000 and less than 200,000, wherein the Mv ratio of the component (A) to the component (B), (A)/(B), is 10 or more, the film as a whole has a molecular weight of 300,000 to 1,500,000, and the film has a fuse temperature of 120 to 140°C, a film breakage temperature of 150°C or more, and a ratio of the piercing strength at 140°C to the piercing strength at 25°C of 0.01 to 0.25.
- 2. (Original) The microporous polyolefin film according to claim 1, wherein the fuse temperature is 120 to 135°C.
- 3. (Original) The microporous polyolefin film according to claim 1, wherein the fuse temperature is 120 to 133°C.
- 4. (Original) The microporous polyolefin film according to any of claims 1 to 3 having a short-circuit temperature of 152°C or more.
- 5. (Currently amended) The microporous polyolefin film according to any of claims claim 1 [[to 4]] having a thermal shrinkage starting temperature in a TD direction of 90°C or more.

- 6. (Original) The microporous polyolefin film according to claim 5 having a thermal shrinkage starting temperature in the TD direction of 100°C or more.
- 7. (Original) The microporous polyolefin film according to claim 6 having a thermal shrinkage starting temperature in the TD direction of 110°C or more.
- 8. (Currently amended) The microporous polyolefin film according to any of claims claim 1 [[to 7]] having a film thickness of 5 to 24 µm.
- 9. (Currently amended) The microporous polyolefin film according to any of claims claim 1 [[to 7]] having a porosity of 30 to 60%.
- 10. (Currently amended) The microporous polyolefin film according to any of claims claim 1 [[to 7]] having a 25°C piercing strength of 3 to 10 N/20 μm.
- 11. (Original) A process for producing a microporous polyolefin film which has a molecular weight of 300,000 to 1,500,000 as a whole of the film, a fuse temperature of 120 to 140°C, a film breakage temperature of 150°C or more, and a ratio of the piercing strength at 140°C to the piercing strength at 25°C of 0.01 to 0.25, the process comprising kneading a mixture comprising a polyolefin composition comprising 5 to 95 wt% of polyethylene (A) having a viscosity average molecular weight (Mv) of 2,000,000 or more, a first melting-peak signal height as determined by DSC (differential scanning calorimetry) of 3.0 mW/mg or more, a specific surface area of 0.7 m²/g or more and an average particle size of 1 to 150 μm and 95 to 5 wt% of polyethylene (B) having an Mw of more than 10,000 and less than 200,000, wherein the Mv ratio of the component (A) to the component (B), (A)/(B), is 10 or more, with a plasticizer; extruding the kneaded product and then molding the product into a gel-like sheet to cool and solidify the sheet; drawing the resulting gel-like sheet; extracting the plasticizer to dry

the sheet; and thermally fixing the film, wherein the thermal fixation step comprises a step of drawing the film in a TD direction after extracting the plasticizer and a subsequent step of thermally shrinking the film in the TD direction with reference to film width after the drawing step.

- 12. (Original) The process according to claim 11, wherein the drawing step is a step of drawing the film after extracting the plasticizer by at least 20% in the TD direction and the thermal shrinkage step is a step of thermally shrinking the film after extracting the plasticizer by at least 10% in the TD direction with reference to the film width after the drawing step.
- 13 (New) The microporous polyolefin film according to claim 1, wherein said film has a fuse temperature of 120 to 133°C, a short-circuit temperature of 152°C or more, a thermal shrinkage starting temperature in the TD direction of 110°C or more and a film thickness of 5 to 24 μm.
- 14. (New) The microporous polyolefin film according to claim 1, wherein said film has a fuse temperature of 120 to 133°C, a short-circuit temperature of 152°C or more, a thermal shrinkage starting temperature in the TD direction of 110°C or more and a porosity of 30 to 60%.
- 15. (New) The microporous polyolefin film according to claim 1, wherein said film has a fuse temperature of 120 to 133°C, a short-circuit temperature of 152°C or more, a thermal shrinkage starting temperature in the TD direction of 110°C or more and a 25°C piercing strength of 3 to 10 N/20 µm.